

Applicant: SINGER  
U.S. Serial No: 10/577,632  
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**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in this application:

1. (currently amended): A mandrel for producing a glass tube or rod, comprising a self-supporting metal material jacket (22), the self-supporting metal material jacket (22) comprising an outer wall and an inner self-supporting structure, wherein the outer wall comprises a metal material and the inner self-supporting structure is selected from the group consisting of at least one support strut, at least one thrust or at least one annular ring, or combinations thereof, the inner self-supporting structure being made of a metal material substantially similar to the metal material of the outer wall.
2. (currently amended): The mandrel for producing a glass tube or rod according to claim 1, wherein the self supporting metal jacket (22) comprises an outer wall and an inner self-supporting structure is selected from the group consisting of a plurality of support struts, a plurality of thrusts or a plurality of annular rings or combinations thereof.
3. (canceled)
4. (canceled)
5. (canceled)
6. (withdrawn): A mandrel for producing a glass tube or rod, comprising, a body (1) comprising a ceramic composite material, and an external metal material jacket (2) surrounding at least a portion of said body,

wherein the ceramic composite material has a substantially similar thermal expansion coefficient as the metal material of said jacket.

7. (withdrawn): The mandrel according to claim 6, wherein the ceramic composite material is a bonded material.
8. (withdrawn): The mandrel according to claim 6, wherein the ceramic composite material is a casting slip material.
9. (withdrawn): The mandrel according to claim 6, wherein the ceramic composite comprises MgO-MgAl<sub>2</sub>O<sub>4</sub>.
10. (withdrawn): The mandrel according to claim 6, wherein the body (1) and the metal jacket (2) comprise at least a portion with an essentially cylindrical shape.
11. (withdrawn): The mandrel according to claims 6, wherein the body (1) and the metal jacket (2) comprise at least a portion with conical shape.
12. (withdrawn): The mandrel according to claim 6, wherein the entire body (1) and the metal jacket (2) comprise a conical shape.
13. (withdrawn): The mandrel according to claim 6, wherein the body (1) and the metal jacket (2) is cylindrical at the rear end portion and conical at the front end portion.
14. (currently amended): The mandrel according to claim 1, wherein the mandrel (42) comprises at the a rear end a biasing means adapted to assure a tight fit between a body (1) and the jacket (22).

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15. (previously presented): The mandrel according to claim 1, wherein the mandrel (42) is axially symmetrical along its longitudinal axis.
16. (previously presented): The mandrel according to claim 1, wherein the mandrel (42) is a Danner blowpipe/tube or Danner sleeve.
17. (previously presented): The mandrel according to claim 1, wherein the mandrel (42) provides an inner channel for blowing gas through and allows treating the inside surface of the glass tube with at least one gas.
18. (previously presented): The mandrel according to claim 1, wherein the metal material comprises a PGM material.
19. (withdrawn): The mandrel according to claim 1, wherein the metal material comprises platinum alloy.
20. (withdrawn): The mandrel according to claim 1, wherein the metal material comprises an oxide dispersion strengthened platinum alloy.
21. (withdrawn): The mandrel according to claim 20, wherein the metal material comprises 0.1 to 0.5, and more preferably 0.16 wt.-% of zirconium and/or yttrium oxide.
22. (previously presented): The mandrel according to claim 1, wherein the metal material jacket comprises a coating which upon contact with an inside surface of the tube being produced is released and accumulates on the inside surface to form a coating thereon.

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23. (currently amended): The mandrel according to claim 1, wherein the mandrel (42) has a front end and a rear end with respect to the flow direction of [[the]] a glass material and wherein [[the]] diameters from the rear end to the front end are equally conical or decreasing.
24. (currently amended): The mandrel according to claim [[1]] 23, wherein the mandrel (42) comprises essentially at the front end a fixed bearing adapted to rotate the mandrel around said axis.
25. (currently amended): The mandrel according to claim [[1]] 23, wherein the mandrel (42) comprises essentially at the rear end a floating bearing, adapted to rotate the mandrel (42) around said axis.
26. (currently amended): The mandrel according to claim [[1]] 14, wherein the biasing means comprises at least one spring (6).
27. (withdrawn): A system for producing a glass rod or tube with a Danner blow tube according to anyone of the preceding claims comprising further a nozzle for dispensing a flow of glass to the surface of the Danner blowpipe at one end of said blowpipe at a relatively high temperature in order to form a glass film, which is removed or pulled at the other end in form of a tube.
28. (withdrawn): A method for producing a glass tube or rod according to claim 1, with a Danner blow tube.
29. (withdrawn): Use of the mandrel, according to claim 1, for producing a glass tube or rod.
30. (withdrawn): Use of the mandrel according to claim 29 for a Danner process.

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31. (new): A mandrel for producing a glass tube or rod, comprising a self-supporting metal material jacket, the self-supporting metal material jacket comprising an outer wall and an inner self-supporting structure, wherein the outer wall comprises a metal material and the inner self-supporting structure is selected from the group consisting of at least one support strut, at least one thrust or at least one annular ring, an embossed or corrugated plate or combinations thereof, the inner self-supporting structure being made of a metal material substantially similar to the metal material of the outer wall.

32. (new): The mandrel for producing a glass tube or rod of claim 31, wherein the inner self-supporting structure is selected from the group consisting of a plurality of support struts, a plurality of thrusts or a plurality of annular rings or combinations thereof, said plurality of support struts, thrusts or annular rings consisting of an embossed or corrugated plate.